

Work Order ID 55756

January 29, 2010 11:59:09 AM



Page 1

Item ID: D2947

Accept



Setup Start



Revision ID:

Stop



Item Name: Clamp

Start Date: 1/29/10 Start Qty: 160.00



Cust Item ID:

Required Date: 2/05/10 Req'd Qty: 160.00



Customer:

Reference:

Run Start



Approvals:

Process Plan: *W*

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2947

Rev A1

100

0.00



Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: *11272* E-mail or Ship DXF file to vendor ☐ Laser cut flat pattern as per Dwg D2947 ☐ Possible supplier: GFII ☐ Material release note is required.

PL 10-1-29
(160)

110

0.00



Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.00

Packaging

Ensure material certification is attached

PL 1/4/17
(160)

120

0.00



QC

QC6- Inspect dimensions to drawing

Memo

0.00

Quality Control

2) 8.06.02.22

counted
(160)
ASPOL9

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Page 2

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Cust Item ID:

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Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

1- Deburr any rough edges

n/a

140



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

TUMBLE

n/a

150



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Quality Control

AS PER QSP019

n/a

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Cust Item ID:

Required Date: 2/05/10 Req'd Qty: 160.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

Per 1/22 (160)

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/02/23

MF
10-2-22

Picklist Print

January 29, 2010 11:59:08 AM

Page 1

Work Order ID: 55756



Parent Item: D2947

Parent Item Name: Clamp



Start Date: 1/29/10

Required Date: 2/05/10

Comments: IPP: A000.01.14 New issue [IEC]
IPP Rev:B No longer made in house 07-06-11 JLM

Start Qty: 160.00

Required Qty: 160.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2947B		Purchased	No			100	Each	100.0000	168.4211			
										 <u>Platz/17</u> (160)		
Clamp												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

100

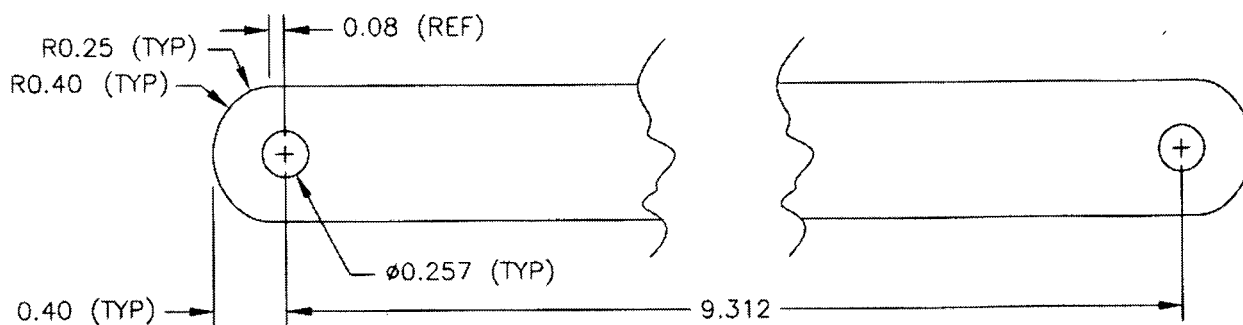
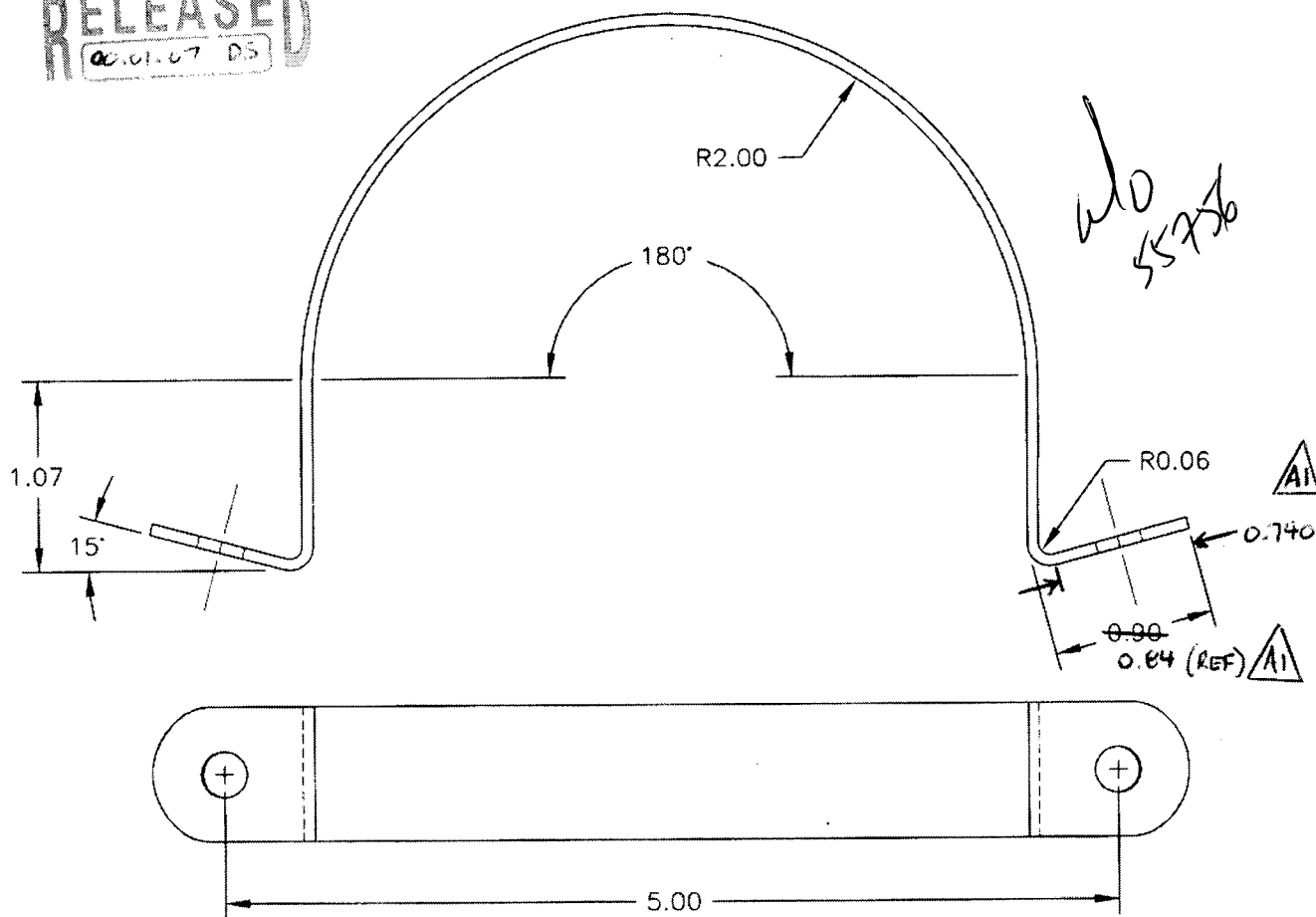
55004

100



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2947	REV. A SHEET 1 OF 1
DATE 00.01.06		TITLE CLAMP	SCALE 1:1
A	00.01.06	NEW ISSUE	

RELEASED
00.01.07 DS



D2947 FLAT PATTERN

MATERIAL: AISI 304/316 SS 0.063 THICK x 0.75 WIDE
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES

ADD 0.740 DIMENSION; 0.84 WAS 0.90
01 09.07
A1

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET
ANNEALED
2B FINISH

SPECIFICATION: MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240

PART NUMBER: M304S TT GA
GA

WHERE "TT" = GAUGE THICKNESS

EG. 16 GAUGE SS SHEET = M304S16GA

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021875	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.09375	0.084 - 0.098
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176

REFERENCE ONLY

RELEASED
09/06/01

B	REFORMAT DWG, ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 08-020A	CP	09.06.01
A	NEW ISSUE	DS	01.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.06.01		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. M304S	REV. B SHEET 1 OF 1
TITLE 304/316 SS SHEET	SCALE NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO11272

Purchase Order Date 1/29/10

PO Print Date 1/29/10

Page Number 1 of 1

Order From :

VC-GFI001

GFI
180 AVENUE LABROSSE
POINTE CLAIRE, QC H9R 1A1
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	514 630 4877	Requisition Nbr	
Vendor Fax	514 630 4849	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	

Ship To :

DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2947B	Clamp	2/01/10 Yes	160.00 Each	Purolator ground	\$10.0000	\$1,600.00

Special Inst: Laser cut flat pattern as per DWG: D2947
REV A
B# 55756

PO Total: \$1,600.0

PO Instructions: ASAP

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

Change Nbr: 1

Change Date: 1/29/10



180 AVENUE LABROSSE
POINT-CLAIRE, QC, CANADA H9R 1A1
TÉL.:(514) 630-4877 - FAX:(514) 630-4849

GFI est une division de Thomas & Betts Fabrication Inc. / GFI is a division of Thomas & Betts Manufacturing Inc.



BON DE LIVRAISON / SHIPPING MEMO

DATE DE LIVRAISON / SHIPPING DATE			N° DE BON DE LIVRAISON SHIPPING MEMO NO.	PAGE
JR - DY	MO. - MO.	AN. - YR		
15	02	10	0432592	1/1



VI-NDU À / SOLD TO

EXPÉDIÉ À / SHIP TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

CODE DE CLIENT CUSTOMER CODE	N° DE CONTRAT JOB NO.	VOTRE N° DE COMMANDE YOUR PURCHASE ORDER NO.	EXPÉDIÉ PAR SHIP VIA
DART	GFI-0299	0210080	PO11272
QUANTITÉ QUANTITY	N° DE PIÈCE PART NO.	DESCRIPTION	
160	D2947B	CLAMP	
		CERTIFICATE OF CONFORMANCE REQ	
		MFG. JOB # <u>J02 10080-001</u> QTY <u>160</u>	

EXPÉDITEUR
SHIPPER

N° DE BON DE LIVRAISON
SHIPPING MEMO NO.

REÇU PAR / RECEIVED BY

DATE

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RÉCEPTION.
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.

CERTIFICATE OF COMPLIANCE CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

S. 10/01/02

CERTIFICATE NO. <u>12</u>		OUR JOB NO <u>J0210080</u>		SHIPPING MEMO <u>0432592</u>	
ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME
<u>--</u>	<u>160 PCS</u>	<u>PO11272</u>	<u>D2947B</u>	<u>A</u>	<u>CLAMP</u>
MATERIAL		SUPPLIED BY		MAT. REL. NO.	
<u>SST 304</u>		<u>TW METALS / NORTH AMERICAN</u>		<u>H/N# 4WN7</u>	

#	PROCESS	PROCESSOR	RELEASE NOTE #
1	FIRST ARTICLE INSPECTION REPORT ON FILE	GFI	CONFORMS
2	REF. GFI MANUFACTURING JOB NUMBER J0210080-001 (160 PCS)		
3			
4			
5			
6			
7			
8			
9			

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 15 FEBRUARY 2010

G.F.I. Q.C. REP. *Coltan H...*



DP12-001 REV 0 Bombardier Certificate of Compliance
TW Metals District Procedure

Revision 0

Revision Date 04-03-00

Superseding Initial

Page 1 of 1

CERTIFICATE OF COMPLIANCE

FRAUD AND FALSIFICATION STATEMENT

The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under federal statutes including federal law Title 18 chapter 47

CERTIFICATE OF COMPLIANCE

This certificate of compliance certifies that the material supplied on the purchase order number below complies in all respects with the material description and procurement specifications

MERCURY FREE STATEMENT

We certify that mercury, radium, or alpha bearing instruments and / or equipment which might cause contamination have not been used in the manufacture, fabrication, assembly or testing of any material supplied by TW Metals Inc. Switches, glass thermometers, standard cell and other items containing the above elements may be used, but they will be located so as not to constitute a contamination hazard

CUSTOMER NAME GFIPURCHASE ORDER No 0076358ITEM No 0001 SHIPPER INVOICE No 03256173MATERIAL 304-S/S Sheet SPECIFICATION ASME A240 ← 8MANUFACTURING MILL North American Stainless 10/6/02SIZE .0625" ← HEAT / LOT No 4W117PART No TS06348 X 964A QUANTITY 2EATEST DEPARTMENT CLERK Amy Davis

AUTHORITY

Joe Schnab
Director of Quality Assurance

Certificate: 449204 01
Customer: 0470 002
Your Order: 140349

Mail To:
PENN STAINLESS PRODUCTS INC.
P.O. BOX 9001
190 KELLY ROAD
QUAKERTOWN, PA 18951-9001

Ship To:
PENN STAINLESS PRODUCTS INC.
190 KELLY ROAD
QUAKERTOWN, PA 18951-9001

Date: 2/02/2009 Page: 1

Steel: 304

Finish: 2B

NAS Order: AN 0411727 01

Corrosion: ASTM A262/02aE; 180Bend-OK

PRODUCT DESCRIPTION:

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED; UNS 30400
ASTM A240/08, A480/08a, A666/03; ASME SA240/07, SA480/07, SA666/07
CHEM ONLY ON FOLLOWING ASTM: A276/06a, A479/01, A484/06b, A312/07
CHEM ONLY ON FOLLOWING ASME: SA312/07, SA479/07
AMS 5513H XMRK; MIL-S-5059D AMEND3 (X CROWN MEAS)
NACE MR0175/01, MR0103/07; QQS766D-A X MAG PERM
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; QQS763F Cond A; RoHS Compliant
Material is Free of Radioactive Contamination
NAS Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001:2000
*Melted & Manufactured in the USA; Mat'l is DFARs Compliant

Product ID #	Coil #	Thickness	Width	Weight	Length	Mark	Pieces
034WN7 A	* 034WN7 A	.0595	48.0000	29,060	COIL	2925.9	11

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

HEAT	CM	C	CO	CR	CU	MN	MO	N	NI	P
4WN7	US	.0500	.1825	18.3895	.5550	1.7575	.2970	.0670	8.1365	.0315
		S	SI							
		.0014	.2875							

MECHANICAL PROPERTIES

Product ID #	Coil #	UTS KSI	.2% YS KSI	ELONG %-2"	Hard RB	Tail Hard	A 262 Pr A
034WN7 A	034WN7	FT	99.35	54.27	44.59	89.00	84.00

TW METALS

TEST
FEB 23 2009
ACCEPTED

NAS hereby certifies that the analysis on this certification is correct and the material meets the specifications stated.

QC ENGINEER

ERIC HESS

2/02/2009

Certificate of Mill Test Results
SO QTN-866065-001
Pg 1/1

/ROSEMARY

PO/Rel M49208225

PENN STAINLESS PRODUCTS, INC.

PART NO. 16GA 2B FINISH X 48.0000" X 120.0000" L/S
SHEET 304 AN. STLS STL
T W METALS, INC.